

WHAT IS CLAIMED IS:

1. A portable radio terminal for improving the quality of a polarization efficiency caused by the fact that the terminal is held in a user's left or right hand, said terminal comprising:
  - a housing configured to house various components;
  - a radio circuit configured to be included in said housing;
  - a matching circuit, provided in the vicinity of one end face perpendicular to a longitudinal direction of said housing, and configured to match radio waves during communication;
  - a linear antenna configured to extend from said one end face of said housing along a longitudinal one side of said housing; and
  - a load circuit which is provided between the tip of said matching circuit and the base end of said linear antenna and which has a variable load value.
2. A portable radio terminal as set forth in claim 1, wherein said load circuit varies said load value so as to always improve a polarization efficiency regardless of the position and direction of said linear antenna which are based on how to hold said housing.
3. A portable radio terminal as set forth in claim 1, wherein said load circuit has the function of changing the value of the load so as to increase the quantity of radiation of vertically polarized waves radiated from said housing.
4. A portable radio terminal as set forth in claim 1, wherein said load circuit has the function of changing the value of the load so as to increase the quantity of radiation of horizontally polarized waves radiated from said housing.
5. A portable radio terminal as set forth in claim 1, wherein said matching circuit is provided at a position which is offset from the longitudinal center line of said housing.
6. A portable radio terminal as set forth in claim 1, wherein

said load circuit comprises a plurality of reactances and electronic switches, each of which is connected to a corresponding one of said reactances, and which further comprises a control circuit configured to change the value of the load of said load circuit by controlling said electronic switches.

7. A portable radio terminal as set forth in claim 6, wherein at least one of said plurality of reactances is a short-circuiting line, and each of the remaining reactances comprises a combination of a capacitor and a coil.

8. A portable radio terminal as set forth in claim 1, wherein said load circuit comprises a plurality of reactances and a mechanical switch connected to said reactances, and which further comprises a control circuit configured to change the value of the load of said load circuit by controlling said mechanical switch.

9. A portable radio terminal as set forth in claim 8, wherein at least one of said plurality of reactances is a short-circuiting line, and each of the remaining reactances comprises a combination of a capacitor and a coil.

10. A portable radio terminal as set forth in claim 1, wherein said load circuit is capable of switching at least the value of said load to any one of a short-circuit value, an open value and a capacitive value.

11. A portable radio terminal as set forth in claim 1, which further comprises expanding and contracting means for causing said linear antenna to be mechanically extended and retracted, and wherein the end portion of said linear antenna is connected to said load circuit when said linear antenna is extended, and the tip portion of said linear antenna is connected to said load circuit when said linear antenna is retracted.

12. A portable radio terminal as set forth in claim 1, wherein said matching circuit comprises a linear matching element.
13. A portable radio terminal as set forth in claim 12, wherein said linear matching element is a linear element which is formed so as to have a predetermined shape, said linear element having an electric length of any one of a quarter wavelength, a half-wavelength and a three quarter-wavelength.
14. A portable radio terminal as set forth in claim 12, wherein said linear matching element is a meander element which is formed so as to have a meander shape as said predetermined shape.
15. A portable radio terminal as set forth in claim 12, wherein said linear matching element is a zigzag-shaped element which is formed so as to have a zigzag shape as said predetermined shape.
16. A portable radio terminal as set forth in claim 12, wherein said linear matching element is a helical element which is formed so as to have a helical shape as said predetermined shape.
17. A portable radio terminal as set forth in claim 12, wherein said linear matching element is a conical element which is formed so as to have a conical helical shape as said predetermined shape.
18. A portable radio terminal as set forth in claim 12, wherein said linear matching element is a rectangular helical element which is formed so as to have a rectangular helical shape as said predetermined shape.
19. A portable radio terminal as set forth in claim 12, wherein said linear matching element is a pyramid helical element which is formed so as to have a pyramid helical shape as said predetermined shape.
20. A portable radio terminal as set forth in claim 12, wherein

said linear matching element functions as a small antenna.